

## Course Description:

This course furthers students' ability to work between graphical, numerical, analytical, verbal, and written representations as they apply to the Advanced Placement syllabus. However, this course extends beyond the AB curriculum to include work with parametric, polar, and vector forms; more work with differential equations; L'Hopital's Rule; length of a curve (including parametric form); and polynomial approximations and series. Like the AB course, graphing calculators are used extensively to support analytic methods and to give students visual representations that allow a deeper understanding. Students enrolled in this class are required to take the Advanced Placement BC examination Wednesday, May 8, 2013, which results in a BC score and an AB sub-score on the content specific to the AB curriculum. The AP fee of approximately \$90 is the responsibility of the student.

**Text:** *Calculus of a Single Variable* (Houghton Mifflin, 2010).

## Required Supplies:

Students must have a pencil, eraser, paper, textbook, a graphing calculator or other graphing utility and notebook at every class meeting.

## Assessment:

Letter grades are earned according to the school-wide grading scale in the student handbook. Percentages are calculated from the following categories:

- Daily work, Group work, Projects, and Homework - 15%
- Differentiation and integration Quizzes, Content Quizzes - 15%
- Tests - 70%

The midterm exam counts one-third of the midterm grade. At the end of the term, the average of the final and midterm exams together count one-third of the final grade for the course.

## Classwork and Homework Expectations:

All work must be completed in pencil, work submitted in ink will not be accepted.

Homework should be neat, free of stains, scribbles, and especially notebook fringes.

Late work is unacceptable and will result in a 20% deduction if turned in prior to 7:45am the morning after it was due, work turned in after the 7:45am deadline will receive 0%.

Work assigned or collected when a student is absent is due by the second day following the student's return to class without penalty. Students are responsible for all work missed immediately upon return for pre-planned absences (field trips, sports, family vacations, etc.)

Tests are weighted heavily in this course to prepare students for high stakes testing which has become a reality in our society. Any option given students to improve a test grade, usually corrections or retake exams, will have a maximum possible score of 89.99%. Quizzes and homework grades cannot be made-up. The best four (out of a possible ten) of the differentiation and integration quizzes will be scored.

**Student Expectations:**

Students are expected to take responsibility for their own learning in this course. This includes being attentive and involved in classroom activities, completing all homework assigned in a timely fashion, getting assistance with difficult problems, asking questions, making arrangements to make-up missed classes and making up the work assigned on any day absent. Attendance for the entire class is important. Students must be seated by the time the bell rings to start class and will be dismissed by the instructor near the time of the bell concluding class. Students are not to pack up early. Students may be issued passes out for emergency situations but are expected to keep the number of passes out to a minimum. Cell phone use is prohibited. Cell phones must be powered off and out of sight if brought into the classroom unless students have prior permission from the instructor.

**A note to parents:**

Mathematics, especially at this level, can be difficult for many students. As parents, the best help you can give your student is to make sure they are in attendance and prepared for class every day and make sure they are keeping up with the pace of the course on a daily basis. Especially in the block schedule, one missed day of class or one lesson with a lot of unresolved confusion is a very big challenge to overcome. Students must be diligent in keeping up with the pace of the course. I do not believe in extra credit. Students who have extra time should devote that time to studying and working additional problems from the current topics. Mr. Bremel is available most days after school or mornings by appointment if the curriculum becomes particularly challenging. Please contact me immediately via email [pbremel@burrburton.org](mailto:pbremel@burrburton.org) if you have a concern about the course.

Printed Student Name: \_\_\_\_\_

By signing below I am indicating that I have read and understand the course expectations,

Student signature: \_\_\_\_\_ Date \_\_\_\_\_

Parent signature: \_\_\_\_\_ Date \_\_\_\_\_